

ABSTRACT

Title

A clinical study on the dermatological manifestations of obesity.

Background and objectives.

Obesity is a major concern in our era with many adolescents and adults being obese. Obese individuals have numerous physiological changes which predispose them to many dermatological conditions. This is of concern to us as many of these conditions can act as markers for obesity and impending systemic consequences of obesity. This study was done to find the common dermatoses associated in adults with a BMI of $> 30 \text{ kg/m}^2$ who presented to the skin outpatient department of Coimbatore Medical College Hospital.

Methodology

This is a descriptive study conducted from August 2014 to July 2015 at the OP department of skin, Coimbatore Medical College Hospital. Hundred patients with age > 12 yrs and BMI $> 30 \text{ kg/m}^2$ were selected and included in the study. Diabetes was ruled out and lipid profile was carried out for all patients. Other necessary investigations like biopsy, KOH mount and immunofluorescence were done for relevant cases.

Results

There were 100 patients with 169 dermatoses seen in the study. Male female ratio was 1.5: 1. Most cases belonged to the age group of 31- 40 yrs. Nearly 76% all cases were in grade 1 obesity according to their BMI levels. Only 3 cases were seen in grade 3 obesity. Lipid profile alterations were seen in 29% of all cases. Skin tag was the most common dermatosis seen in the study followed by acanthosis nigricans, plantar hyperkeratosis and striae.

Conclusion

Obesity is a rising modern epidemic which can impact the normal physiology of skin leading to various dermatological conditions. Many of these dermatoses are so common among obese patients so they can be considered as a marker for obesity. Early identification of these conditions can be useful in preventing the deleterious effects of obesity on the body. Severity of obesity also determines the nature of lesions occurring in these patients. Lipid profile changes are also commonly seen in these patients. So treatment of lipid profile in addition to weight reduction can decrease the occurrence of these dermatoses.

Key words

Obesity; skin tags; acanthosis nigricans; plantar hyperkeratosis; lipid profile.